

tissue resistance, prevents abnormal proliferation and differentiation of fibroblasts with the formation of hypertrophic and keloid scars.

Conclusions. Despite the progress made in the treatment of purulent-inflammatory processes, including combined ointments, it should be pointed that the creation of new semisolid MF with substances that stimulate reparative processes remains relevant.

NEW DRUG FOR SUBLINGUAL APPLICATION

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Introduction. Sublingual (under the tongue) administration of drugs is based on the fact that the mucous membrane of the oral cavity has a rich blood supply, especially in the area of the tongue and its root. This administration of drugs ensures their rapid entry into the systemic bloodstream, bypassing the liver, with a high degree of bioavailability and accordingly the rapid development of the therapeutic effect. Preparations for sublingual use belong to different pharmacological groups, namely inorganic salts, monosaccharides, amino acids and other low molecular weight organic compounds, that have different spectra of therapeutic action.

The clear representatives of these are drugs, which based on glycine. Chemical structure of glycine is a common substitute aliphatic amino acid, which synthesizes in the body of every person. Glycine ingests through the gastrointestinal tract firstly to the the liver with the bloodstream, where it is used for protein synthesis. When glycine is used sublingually, it is absorbed into the bloodstream and enters the brain immediately. Under the action of glycine, neurons produce less glutamic acid, which has a "stimulating" effect, and more - gamma-aminobutyric acid, which exhibits "inhibitory" activity, including pregnant women.

In developing of the new drug for the prevention of negative effects on the hormonal status of pregnant women of various etiologies, primarily stress, it was proposed to use in its composition as a second active ingredient - glycine.

Therefore, an important step in the development was finding out about the technology of obtaining a dosage form for sublingual use.

Aim. Identify the technological aspects of creating a tool in the form of sublingual tablets.

Materials and methods. Object – a new drug, which based on glycine for sublingual use. Methods - pharmaceutical technology.

Results and discussions. It is known that under conditions of sublingual administration, it is important to evenly and completely absorb the appropriate dosage form, otherwise the flow of active substance into the blood decreases and the effectiveness of therapy decreases.

To achieve such decomposition is possible by using one or more excipients. The choice should be made among organic compounds, possibly in the form of hydrates, namely dextrose monohydrate, maltodextrin, lactose monohydrate, dextrin, mannitol, sorbitol, xylitol, sucrose and lactose, in an amount of 15 to 75% by weight.

A necessary requirement for sublingual tablets is the addition of a component that absorbs liquid upon contact in a liquid medium and promotes disintegration. The water-swellable excipient may be selected from superdisintegrants such as crospovidone, croscarmellose, sodium starch glycolate, cellulose derivatives (microcrystalline cellulose), starch, alginic acid and inorganic clays (approximately bentonite, aluminosite from aluminosilicates). up to 5% of the total weight of the tablet.

In addition to the components, which are responsible for the uniform distribution of the tablet in the oral cavity, include other multifunctional fillers (magnesium stearate, stearic acid, talc and waxes; preservatives; flavorings; antioxidants; acidifiers - lemon, malic, tartaric, funesorbic acids; surfactants; dyes).

The finished dosage form for sublingual use is obtained by various methods of tableting. The common methods of obtaining tablets are direct compression (dry mixing), dry granulation with compression, moisture granulation with drying and compression.

Due to the fact that the new prophylactic drug for pregnant women contains two active pharmaceutical ingredients that have very different physicochemical and technological characteristics, it is planned to test the tablets through granulation.

An important factor that have influence on the uniform distribution of the dosage of active substances throughout the weight of the tablet is its size, which may not always be suitable for sublingual use. The weight of tablets is mainly 0.05–0.8 g and it is determined by the dosage of active substances and the amount of excipients in their composition. Sublingual tablets are now available in round, oval, oblong or other shapes with a flat, convex or other surface without the obligatory use of a line. A tablet diameter of 2 to 14 mm, but most often choose of 9 or 12 mm.

Conclusions. Due to the theoretical provisions of obtaining drugs for sublingual use, and the future conducting complex of the experimental studies of developing a new product, it can be expected for expanding the range of domestic drugs to prevent the negative impact of factors of various etiologies on hormonal status of pregnant women.

PHYSICAL AND-CHEMICAL STUDIES OF GEL FOR THE TREATMENT OF INFLAMMATORY SKIN DISEASES

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Introduction. Inflammatory non-communicable skin diseases are widespread among the population of different countries and affect all social strata. Such diseases include atopic dermatitis, eczema, herpes zoster, psoriasis, urticaria and others. Among the large group of inflammatory skin diseases, special attention is paid to the study of dermatitis and psoriasis, which is one of the most common dermatoses in the structure of inflammatory non-communicable skin diseases, which affect 40 to 50% of the population. Given not only the decline in the quality of life of patients, but also the severe consequences that cause this disease, it is important to develop new drugs and their research

Aim. Development of extemporaneous gel which includes aloe juice and panthenol for the treatment of inflammatory skin diseases. Carrying out of physicochemical researches, namely, studying of homogeneity and osmotic activity of the offered gel for treatment of inflammatory diseases of skin.

Materials and methods. We studied the following components: aloe juice, dexpanthenol, carbopol, glycerin, propylene glycol, triethanolamine, purified water; model samples of gel bases, model samples of gel for the treatment of inflammatory skin diseases - organoleptic, physicochemical, pharmacotechnological, statistical methods.

Results and discussions. The key component is aloe juice, due to its bactericidal properties, it is used in streptococcal and staphylococcal infections, it accelerates tissue regeneration. Therefore, it is advisable to include in the composition of the gel anti-inflammatory juice of aloe and dexpanthenol.